

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A new carbonated ~~crushed, mass-type~~ candy-type vitamin preparation which consists essentially of at least one vitamin selected from the group consisting of fat-soluble vitamins and water soluble ~~vitamins, sucrose and starch syrup(maltose syrup);~~ vitamins; sucrose, starch syrup, sodium bicarbonate; and carbon dioxide, wherein the carbonated ~~crush, mass-type~~ candy-type vitamin preparation is manufactured by

1) dissolving, suspending or emulsifying vitamin, ~~sucrose, and starch syrup(maltose syrup)~~ sucrose and start syrup in a suitable amount of ~~water~~ water, and the mixture is heated rapidly to obtain a molten mass;

2) concentrating the molten mass to about 1-3 parts by weight of water;

3) transferring the concentrated molten mass to a pre-heated autoclave where color, essence and sodium bicarbonate are added by rapid stirring and carbon dioxide gas is injected by rapid stirring to disperse the carbon dioxide bubbles under high pressure;

4) introducing the molten carbon-dioxide-gasified mass into a suitable tube or candy-type mold;

5) cooling the tube or mold injected with molten carbon-dioxide-gasified mass to or below 15°C;

6) removing the cooled, carbonated candy-type mass and crushing it below 20°C, and below 40% ~~of RH;~~ relative humidity;

7) passing the crushed carbonated mass through a standard sieve; and

8) sealing the carbonated candy-type mass or the sieved crushed carbonated mass in a hermetic package.

2. (Currently Amended) The carbonated ~~crushed, mass-type~~ candy-type vitamin preparation of claim 1 wherein the at least one vitamin is selected from the group consisting of vitamin A₁(retinol), vitamin A₂(3-dehydroretinol), vitamin A₃, vitamin D₂(ergocalciferol), vitamin D₃(cholecalciferol), provitamin D₂(ergosterin), provitamin D₃(dehydrocholesterol), vitamin E(α -tocopherol, β -tocopherol, γ -tocopherol, δ -tocopherol), vitamin F(linoleic acid, linolenic acid), vitamin K₁, vitamin K₂, vitamin U, vitamin B₁(thiamine), vitamin B₂(riboflavin), vitamin B₆(pyridoxin), nicotinamide, nicotinic acid, pantothenic acid, vitamin H(biotin), folic acid, vitamin B₁₂(cyanocobalamin), choline, inositol, vitamin L₁(anthranilic acid), vitamin L₂(5'-thiomethyladenosine), vitamin B₁₃(orotic acid), and vitamin C(ascorbic acid).

3. (Withdrawn) A process for the preparation of a new carbonated candy-type vitamin preparation comprising at least one vitamin selected from the group consisting of fat-soluble vitamins and water soluble vitamins, sucrose and; starch syrup(maltose syrup), sodium bicarbonate; and carbon dioxide, wherein the carbonated candy-type vitamin preparation is manufactured by

1) dissolving, suspending or emulsifying sucrose, starch syrup(maltose syrup) and other ingredients, except carbon dioxide and sodium bicarbonate in a suitable amount of water and the mixture is heated rapidly to obtain a molten mass;

2) concentrating the molten mass to about 1-3 parts by weight of water;

3) transferring the concentrated molten mass to a pre-heated autoclave where color, essence and sodium bicarbonate are added by rapid stirring and carbon dioxide gas is injected by rapid stirring to disperse the carbon dioxide bubbles under high pressure;

4) introducing the molten carbon-dioxide-gasified mass into a suitable tube or candy-type mold;

5) cooling the tube or mold injected with molten carbon-dioxide-gasified mass to or below 15°C;

6) removing the cooled, carbonated candy-type mass and crushing it below 20°C. and below 40% of RH;

7) passing the crushed carbonated mass through a standard sieve; and

8) sealing the carbonated candy-type mass or the sieved crushed carbonated mass in a hermetic package.

4. (Withdrawn) The process for the preparation of a new carbonated candy-type vitamin preparation of claim 3, wherein the at least one vitamin is selected from the group consisting of vitamin A₁(retinol), vitamin A₂(3-dehydroretinol), vitamin A₃, vitamin D₂(ergocalciferol), vitamin D₃(cholecalciferol), provitamin D₂(ergosterin), provitamin D₃(dehydrocholesterol), vitamin E(α -tocopherol, β -tocopherol, γ -tocopherol, δ -tocopherol), vitamin F(linoleic acid, linolenic acid), vitamin K₁, vitamin K₂, vitamin U, vitamin B₁(thiamine), vitamin B₂(riboflavin), vitamin B₆(pyridoxin), nicotinamide, nicotinic acid, pantothenic acid, vitamin H(biotin), folic acid, vitamin B₁₂(cyanocobalamin), choline, inositol, vitamin L₁(anthranilic acid), vitamin L₂(5'-thiomethyladenosine), vitamin B₁₃(orotic acid), and vitamin C(ascorbic acid).

5. (Currently Amended) A new carbonated ~~crushed, mass-type~~ candy-type vitamin preparation of claim 1, additionally comprising at least one ingredient selected from the group consisting of trace inorganic compounds, amino-acids, organic acids and other ingredients necessary to the human being.

6. (Currently Amended) A new carbonated ~~crushed, mass-type~~ candy-type vitamin preparation of claim 1, additionally comprising at least one ingredient selected from the group consisting of glycine, alanine, valine, leucine, isoleucine, serine, threonine, cysteine, methionine, asparaginic acid, glutaminic acid, lysine, arginine, phenylalanine, tyrosine, histidine, tryptophane, proline, oxyproline, lactose, fructose, glucose, K1, MgO, Cu₂O, ZnSO₄, MnSO₄, CaHPO₄, KCl, dried yeast (yeast containing Cr, yeast containing Se, yeast containing Mo) , precipitated calcium carbonate, pomegranate extract, collagen, chitosan, green tea extract, Ginseng Radix extract, Acanthopanax Cortex extract, onion extract, malic acid, citric acid, tartaric acid, fumaric acid, maleic acid and acetic acid.

7. (Withdrawn) A process for the preparation of a new carbonated candy-type vitamin preparation of claim 5 additionally comprising at least one ingredient selected from the group consisting of trace inorganic compounds, amino acids, oretanic acids and other ingredients necessary for the human being.

8. (Withdrawn) A process for the preparation of a new carbonated candy-type vitamin preparation of claim 5 additionally comprising at least one ingredient selected from the group consisting of glycine, alanine, valine, leucine, isoleucine, serine, threonine, cysteine, methionine, asparaginic acid, glutamic acid lysine, arginine, phenylalanine, tyrosine, histidine, typtrophane, proline, oxyproline, lactose, fructose, glucose, KI, MgO, Cu₂O, ZnSO₄, MnSO₄, CaHPO₄., KCl, dried yeast (yeast containing Cr, yeast containing Se, yeast containing Mo) , precipitated calcium carbonate, pomegranate extract, collagen, chitosan, green tea extract, Ginseng Radix extract, Acanthopanax Cortex extract, onion extract, malic acid, citric acid, tartaric acid, fumaric acid, maleic acid and acetic acid.